BRUHAT BANGALORE MAHANAGARA PALIKE

DASARAHALLI Sub-Division

BOQ

Name of work:Comprehensive development of bad roads and improvements to road side drain, footpaths, Asphalting and concreting including culvert selected main and other connecting roads of package No.1 in ward No.14, Bagalagunte of Dasarahalli Division in Dasrahalli zone Comprising of 8 works as indicated in Sl No. 122, 123, 124, 125, 126, 127, 128 & 129

Sl No	Description of Work	Unit	Quantity as per Estimate	Rates to be Quoted(Rs.)	
				In Figures	In Words
1	Removing & Refixing stone slabs of drains and pointing in C.M (1:3)	Sqm	11448.60		
2	Removing and resetting of kerb stones	m	532.00		
3	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.	Cum	6575.98		
4	Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications.	Cum	1377.78		
5	Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200	tonne	100.17		
6	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH spec No. 1500,700,2200. including cost of materials, labour, HOM complete as per spec.	Cum	1578.87		
7	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete.				
	7.5cm thick	Sqm	5823.00		
	10cm thick	Sqm	52.00		
8	Providing and laying 100mm thick pre-cast cover slabs over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished includingproviding holes in the Cover slabs wherever necessary for easy drainageof surface water including of labour, materials, HOM, curing, lead and lift charges etc, Complete as per MORTH specifications No. 1500,1700.	Sqm	3805.80		
9	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)	Sqm	523.53		
10	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete.	Nos	11304.46	11304.00	
11	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per spec. MORTH Chap 8.	Sqm	2335.50		

Sl No	Description of Work	Unit	Quantity as per Estimate	Rates to be Quoted(Rs.)	
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12	Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by mechanical means attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM complete as per specifications. MORTH I Chapter 3	Sqm	49006.80		
	Leading charges for Scarified quantity	cum	3920.54		
13	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 25.00 km and complete as per specifications.	cum	28068.50		
14	Providing and filling Stone Dust in trenches to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications.	Cum	3447.36		
15	Construction of embankment with approved material Cum Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel I murrum, watering charges & compaction by vibratory roller to 95% of modified proctors density. MORTH Specification No. 305	Cum	3342.76		
16	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 Its conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, soparation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications.	Cum	479.57		
17	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.	Cum	6882.20		
18	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406	Cum	12626.42		

Comprehensive development of bad roads and improvements to road side drain, footpaths, Asphalting and concreting including culvert selected main and other connecting roads of package No.1 in ward No.14, Bagalagunte of Dasarahalli Division

Sl No	Description of Work	Unit	Quantity as per Estimate	Rates to be Quoted(Rs.)	
				In Figures	In Words
	Cleaning the existing black topped surface with Sqm brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. Clause 501 of MORTH V revision	Cum	11365.00		
20	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.Clause 502 of MORTH V revision	Sqm	57240.35		
21	Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision do - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-ll (50 mm to 75 mm) with 4.5 % VG-30 Bitumen	Cum	2863.09		
22	Providing and applying tack coat using 80/100 grade Sqm bitumen(VGlO) in boiler fitted with spray set distributor at the rate of 0.25 kg per sqm on the existing prepared bituminous surface (primed surface) cleaned with mechanical broom, complete as per specifications. Clause 503 of MORTH V revision	Sqm	57261.80		
23	Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.	Cum	1717.43		
24	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803	Sqm	2417.80		
25	0829 RCC pipes NP3 900 mm dia including collars	m	175.00		
26	0750 40 mm nominal size of Coarse aggregate	Cum	70.00		
27	0772 Natural sand 5.6 to 75 micron	Cum	70.00		

Executive Engineer
Dasarahalli Division
BBMP - Bangalore